IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

In re U.S. Patent No. 6,240,376 Trial Number:

Filed: July 31, 1998

Issued: May 29, 2001

Inventors: Alain Raynaud

Luc M. Burgun

Assignee: Mentor Graphics Corporation

Title: Method and Apparatus for Gate-Level Simulation of Synthesized

Register Transfer Level Designs with Source-Level Debugging

Mail Stop PATENT BOARD, PTAB Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,240,376 UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 ET SEQ.



TABLE OF CONTENTS

TAI	BLE OF CONTENTS	. II
EXI	HIBIT LIST	, IV
I.	MANDATORY NOTICES	1
A.	Real Party-In-Interest	1
B.	Related Matters	1
C.	Lead And Back-Up Counsel	1
D.	Service Information	2
II.	PAYMENT OF FEES	2
III.	REQUIREMENTS FOR INTER PARTES REVIEW	2
A.	Grounds For Standing	3
B. 1.	Identification Of Challenge Claims for which <i>inter partes</i> review is requested	
2. 3.	The specific art and statutory ground(s) on which the challenge is based	3
4.		
5.		
IV.	SUMMARY OF THE '376 PATENT	5
A.	Description Of The Alleged Invention	5
B.	Summary Of The Prosecution History	6
	THERE IS A REASONABLE LIKELIHOOD THAT AT LEAST ONE AIM OF THE '376 PATENT IS UNPATENTABLE	



Inter Partes Review of U.S. Patent No. 6,240,376

A.	Identification Of The References As Prior Art	7
1. 2. 3. pa	Gregory patent invalidates claims 1-15 and 20-33 of the '376 patent	9 .11 76 .12
VI.	DETAILED EXPLANATION	.13
A.	Koch Claim Chart	.14
B.	Koch In View Of 1995 Koch Claim Chart	.29
C.	Gregory Claim Chart	.31
D.	Gregory In View Of 1995 Koch Claim Chart	.47
E.	HDL-ICE Claim Chart	.52
F.	Sample Claim Chart	.55
G.	Sample In View Of 1995 Koch Claim Chart	.58
VII.	. CONCLUSION	.59
CEI	RTIFICATE OF SERVICE	.61



EXHIBIT LIST

- 1001. U.S. Patent No. 6,240,376 to Raynaud, et al.
- 1002. Prosecution history of application Serial No. 09/127,584, which matured into the '376 patent.
- 1003. Chen, et al., "A Source-Level Dynamic Analysis Methodology and Tool for High-Level Synthesis," Proceedings of the Tenth International Symposium on System Synthesis, 1997, pp. 134-140, Sep. 1997.
- 1004. Koch, et al., "Breakpoints and Breakpoint Detection in Source Level Emulation," ISSS Proceedings of the 9th International Symposium on System Synthesis, pp. 26-31 (1996).
- 1005. Koch Publication information from CiteCeerX and ACM archives.
- 1006. Koch, et al., "Debugging of Behavioral VHDL Specifications by Source Level Emulation," Proceedings of the European Design Automation Conference, pp. 256-261, September 1995.
- 1007. U.S. Patent No. 6,132,109 to Gregory, et al.
- 1008. HDL-ICETM ASIC Emulation System, Quickturn Design Systems, Inc.
- 1009. Prosecution history for application Serial No. 08/566,401, which matured into U.S. Patent No. 5,838,948.
- 1010. U.S. Patent No. 5,960,191 to Sample, et al.



Petitioner Synopsys, Inc. ("Synopsys" or "Petitioner") respectfully requests *inter partes* review for claims 1-15 and 20-33 of U.S. Patent No. 6,240,376 (the "'376 patent," attached as Ex. 1) in accordance with 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42.100 et seq.

I. MANDATORY NOTICES

Pursuant to 37 C.F.R. § 42.8(a)(1), Synopsys provides the following mandatory disclosures.

A. Real Party-In-Interest

Pursuant to 37 C.F.R. § 42.8(b)(1), Petitioner certifies that Synopsys, Inc. is the real party-in-interest.

B. Related Matters

Pursuant to 37 C.F.R. § 42.8(b)(2), Petitioner is unaware of any judicial or administrative matters that would affect, or be affected by, a decision in this proceeding. The '376 patent was involved in litigation styled as Mentor Graphics Corp. v. EVE-USA, Inc. and Emulation and Verification Engineering, SA, 6:06-CV-341-AA, which was dismissed with prejudice on November 30, 2006.

C. Lead And Back-Up Counsel

Pursuant to 37 C.F.R. § 42.8(b)(3), Petitioner provides the following designation of counsel:



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

